

[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2014-0649; Directorate Identifier 2014-NM-132-AD]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain The Boeing Company Model 787-8 airplanes. This proposed AD was prompted by reports of missing bonded plugs found prior to airplane delivery, during manufacturing inspections, at various locations in certain stringers of the forward electrical equipment (EE) bay of the lower lobe cargo compartments. This proposed AD would require drilling a hole and installing and bonding plugs in certain stringers of the forward EE bay of the lower lobe cargo compartments. We are proposing this AD to detect and correct missing or misaligned bonded plugs which, in the event of a fire, could cause an increased rate of loss of Halon in the lower cargo compartments, and result in the inability to extinguish a fire and consequent loss of control of the airplane.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to http://www.regulations.gov. Follow the instructions for submitting comments.
 - Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet https://www.myboeingfleet.com. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2014-0649; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Francis Smith, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM-150S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6596; fax: 425-917-6590; email: francis.smith@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section.

Include "Docket No. FAA-2014-0649; Directorate Identifier 2014-NM-132-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to http://www.regulations.gov, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

We have received reports of missing bonded plugs found prior to airplane delivery, during manufacturing inspections, at various locations in certain stringers of the forward electrical equipment (EE) bay of the lower lobe cargo compartments. The cause was determined to be miscalculated pressure exposures during design. This condition, if not corrected, could result in missing or misaligned bonded plugs which, in the event of a fire, could cause an increased rate of loss of Halon in the lower cargo compartments, and result in the inability to extinguish a fire and consequent loss of control of the airplane.

Relevant Service Information

We reviewed Boeing Alert Service Bulletin B787-81205-SB530024-00, Issue 001, dated May 15, 2014. For information on the procedures and compliance times, see this service information at http://www.regulations.gov by searching for Docket No. FAA-2014-0649

FAA's Determination

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

Proposed AD Requirements

This proposed AD would require accomplishing the actions specified in the service information described previously, except as discussed under "Differences Between this Proposed AD and the Service Information."

Explanation of "RC" Steps in Service Information

The FAA worked in conjunction with industry, under the Airworthiness

Directives Implementation Aviation Rulemaking Committee, to enhance the AD system.

One enhancement was a new process for annotating which steps in the service information are required for compliance with an AD. Differentiating these steps from other tasks in the service information is expected to improve an owner's/operator's understanding of crucial AD requirements and help provide consistent judgment in AD compliance. The actions specified in the service information described previously include steps that are labeled as RC (required for compliance) because these steps have a direct effect on detecting, preventing, resolving, or eliminating an identified unsafe condition.

As noted in the specified service information, steps labeled as RC must be done to comply with the proposed AD. However, steps that are not labeled as RC are recommended. Those steps that are not labeled as RC may be deviated from, done as part of other actions, or done using accepted methods different from those identified in the service information without obtaining approval of an alternative method of compliance (AMOC), provided the steps labeled as RC can be done and the airplane can be put back in a serviceable condition. Any substitutions or changes to steps labeled as RC will require approval of an AMOC.

Difference Between this Proposed AD and the Service Information

Although Boeing Alert Service Bulletin B787-81205-SB530024-00, Issue 001, dated May 15, 2014, recommends installing and bonding the plugs within 24 months, we and Boeing have determined a 12-month compliance time is appropriate. We have advised Boeing to correct the compliance time statement in the next revision of the service information to specify a 12-month compliance time. In developing an appropriate compliance time for this AD, we considered the degree of urgency associated with the subject unsafe condition, and the average utilization of the affected fleet and time necessary to perform the installation. In light of these factors, we find that a 12-month compliance time represents an appropriate interval of time for affected airplanes to continue to operate without compromising safety.

Costs of Compliance

We estimate that this proposed AD affects 3 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Bonded plug installations	100 work-hours X \$85 per hour = \$8,500	\$3,466	\$11,966	Up to \$35,898

According to the manufacturer, all of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator.

Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
 - (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

The Boeing Company: Docket No. FAA-2014-0649; Directorate Identifier 2014-NM-132-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model 787-8 airplanes, certificated in any category, as identified in Boeing Alert Service Bulletin B787-81205-SB530024-00, Issue 001, dated May 15, 2014.

(d) Subject

Air Transport Association (ATA) of America Code 53, Fuselage Structure (General).

(e) Unsafe Condition

This AD was prompted by reports of missing bonded plugs found prior to airplane delivery, during manufacturing inspections, at various locations in certain stringers of the

forward electrical equipment (EE) bay of the lower lobe cargo compartments. We are issuing this AD to detect and correct missing or misaligned bonded plugs which, in the event of a fire, could cause an increased rate of loss of Halon in the lower cargo compartments, and result in the inability to extinguish a fire and consequent loss of control of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Bonded Plug Installation

Within 12 months after the effective date of this AD: Drill a hole in stringers S-34L and S-35L, remove the plugs, and install and bond new plugs, in the forward EE bay of the lower lobe cargo compartments, as applicable, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin B787-81205-SB530024-00, Issue 001, dated May 15, 2014.

(h) Alternative Methods of Compliance (AMOCs)

- (1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (k)(1) of this AD. Information may be emailed to:
- 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.
- (2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.
- (3) If the service information contains steps that are labeled as RC (Required for Compliance), those steps must be done to comply with this AD; any steps that are not

labeled as RC are recommended. Those steps that are not labeled as RC may be deviated from, done as part of other actions, or done using accepted methods different from those identified in the specified service information without obtaining approval of an AMOC, provided the steps labeled as RC can be done and the airplane can be put back in a serviceable condition. Any substitutions or changes to steps labeled as RC require approval of an AMOC.

(i) Related Information

- (1) For more information about this AD, contact Francis Smith, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM-150S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6596; fax: 425-917-6590; email: francis.smith@faa.gov.
- (2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet https://www.myboeingfleet.com. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

 Issued in Renton, Washington, on September 12, 2014.

Jeffrey E. Duven, Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2014-22622 Filed 09/22/2014 at 8:45 am; Publication Date: 09/23/2014]